# BRUHAT BANGALORE MAHANAGARA PALIKE

## YELAHANKA ZONE

***Name of the work:*** **Estimate for Improvements to Roads and Drains from Kodigehalli Road to Muthuraya Swamy Temple Road in Ward No. 08, Kodigehalli Sub Division.**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | **Estimate Cost:** | | | | | **700000.00** | |
| Sl. No | Description | Unit | No. | L | B | D | Qty | Rate | Amount |
| 1 | KSRRB 300-2. Earth work excavation by manual means in hard soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications MORTH chapter 3. **Page No. 152 / Item No. 19.2 / PWD SR 2013-14** | Cum | | | | | | | |
| | **Desilting of Drains** | | 1 | 75.00 | 0.45 | 0.30 | 10.13 | | |
| | | | 1 | 65.00 | 0.45 | 0.30 | 8.78 | | |
| | **Berm Cutting** | | 1 | 130.00 | 0.90 | 0.15 | 17.55 | | |
| | CC Culvert | | 2 | 5.00 | 2.00 | 1.05 | 21.00 | | |
| | | | | | | | **57.45** | 90.72 | **5212.00** |
| | Basic Rate | 84.00 | | | | | | | |
| | Area Weightage @8% | 6.72 | | | | | | | |
| | **Total** | **90.72** | | | | | | | |
| 2 | Removing B.S. Slab Drain and stacking **(P. 28 / I. 5.32 PWD SR - 2013-14)** | Sqm | | | | | | | |
| | | | 1 | 30.00 | | 1.35 | 40.50 | | |
| | | | 1 | 35.00 | | 1.35 | 47.25 | | |
| | | | | | | | **87.75** | 50.11 | **4397.00** |
| | Basic Rate | 46.40 | | | | | | | |
| | Area Weightage @8% | 3.71 | | | | | | | |
| | **Total** | **50.11** | | | | | | | |
| 3 | Refixing stone slabs of drains and pointing in CM (1:3) **(P. 28 / I. 5.33 PWD SR - 2013-14)** | Sqm | | | | | | | |
| | | | Vide Item No.2 | | | | **87.75** | 70.04 | **6146.00** |
| | Basic Rate | 64.85 | | | | | | | |
| | Area Weightage @ 8% | 5.19 | | | | | | | |
| | Total | **70.04** | | | | | | | |
| 4 | KSRB 4-1.3 : Providing and laying in position **plain cement concrete of mix M7.5 with OPC cement @ 180 Kgs** using **40mm** and down size graded granite metal, corse aggregates @ 0.85 cum and fine aggregtes @ 0.58cum machine mixed, concrete laid in layers not exceeding 15 cms thick, well compacted, **in foundation and plinth**, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 **Page No. 12 / Item No. 4.3 PWD SR - 2013-14** | Cum | | | | | | | |
| | | | 2 | 5.00 | 2.00 | 0.15 | 3.00 | | |
| | | | | | | | **3.00** | 4290.84 | **12873.00** |
| | Basic Rate | 3973.00 | | | | | | | |
| | Area Weightage @ 8% | 317.84 | | | | | | | |
| | **Total** | **4290.84** | | | | | | | |

| Sl. No | Description | Unit | No. | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 5 | KSRB 5.4-3: Providing and constructing granite / trap / basalt size stone masonry in **superstructure with cement mortar 1:6**, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5-1.13 **Page No. 26 / Item No. 5.12/ PWD SR 2013-14** | Cum | | | | | | | |
| | Culvert | | 2x2 | 5.00 | 0.60 | 0.90 | **10.80** | 4341.76 | **46891.00** |
| | Basic Rate | 4096.00 | | | | | | | |
| | Area Weightage @ 6% | 245.76 | | | | | | | |
| | Total | **4341.76** | | | | | | | |
| 6 | KSRB 15.1.3: Providing ruled pointing to coursed stone masonry with cement mortar 1:3, 20 mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. **Page No. 122 / Item No. 15.3 / PWD SR 2013-14** | Sqm | | | | | | | |
| | Culvert | | 2x2 | 5.00 | | 0.90 | **18.00** | 76.32 | **1374.00** |
| | Basic Rate | 72.00 | | | | | | | |
| | Area Weightage @ 6% | 4.32 | | | | | | | |
| | **Total** | **76.32** | | | | | | | |
| 7 | KSRB 4-1.6 : Providing and laying in position plain cement concrete of **mix M15 with cement @ 240 kgs with 20mm** and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1,4.2. **No. 12 / Item No. 4.6 / PWD SR 2013-14** | Cum | | | | | | | |
| | Culvert Coping | | 2x2 | 5.00 | 0.60 | 0.10 | 1.20 | | |
| | | | | | | | **1.20** | 4690.50 | **5629.00** |
| | Basic Rate | 4425.00 | | | | | | | |
| | Area Weightage @ 6% | 265.50 | | | | | | | |
| | **Total** | **4690.50** | | | | | | | |
| 8 | KSRB 4-6.4: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for **vertical surface** such as **walls at any thickness**, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 **Page No.17 / Item No. 4.31 PWD SR - 2013-14** | Sqm | | | | | | | |
| | Covering Slab Bottom | | 2 | 5.00 | 0.60 | | 6.00 | | |
| | Covering Slab Sides | | 4 | 5.00 | | 0.23 | 4.60 | | |
| | | | 4 | 1.80 | | 0.23 | 1.66 | | |
| | | | | | | | **12.26** | 271.08 | **3322.00** |
| | Basic Rate | 251.00 | | | | | | | |
| | Area Weightage @ 8% | 20.08 | | | | | | | |
| | **Total** | **271.08** | | | | | | | |

| Sl. No | Description | Unit | No. | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 9 | KSRB 4.2.2 : Providing and laying in position **reinforced cement concrete of design mix M20 with OPC cement @ 320 Kgs with 20mm** and down size graded granite metal coarse aggregates @ 0.878cum and fine aggregates @ 0.459 cum wuth superplastisier @ 3lts confirming to IS 9103-1999 reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works **in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, return walls, wall** (any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.6 **Page No. 13 / Item No. 4.11 PWD SR - 2013-14** | Cum | | | | | | | |
| | Deck Slab | | 2 | 5.00 | 1.80 | 0.23 | 4.14 | | |
| | | | | | | | **4.14** | 5639.76 | **23349.00** |
| | Basic Rate | 5222.00 | | | | | | | |
| | Area Weightage @ 8% | 417.76 | | | | | | | |
| | **Total** | **5639.76** | | | | | | | |
| 10 | KSRB 4.9.2: Providing **TMT steel reinforcement for R.C.C** work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 **Page No. 19 / Item No. 4.46.2 PWD SR 2013-14** | Qntl | | | | | | | |
| | | | 0.80 | 4.14 | | | **3.31** | 7450.92 | **24677.00** |
| | Basic Rate | 6899.00 | | | | | | | |
| | Area Weightage 8% | 551.92 | | | | | | | |
| | Total | **7450.92** | | | | | | | |
| 11 | KSRRB M300-53: Construction of embankment with approved material gravel/murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement table 300-2 complete as per specifications. (which includes cost of gravel/murrum, watering charges & compaction by vibratory roller) **MORTH specification No. 305, No. 159 / Item No. 19.60 / PWD SR 2013-14** | Cum | | | | | | | |
| | | | 1 | 130.00 | 6.40 | 0.20 | 166.40 | | |
| | | | | | | | **166.40** | 166.32 | **27676.00** |
| | Basic Rate | 154.00 | | | | | | | |
| | Area Weightage @ 8% | 12.32 | | | | | | | |
| | **Total** | **166.32** | | | | | | | |

| Sl. No | Description | Unit | No. | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 12 | Providing, laying, spreading and compacting graded stone aggregate to **wet mix macadam** specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications **(P. 170 / I. 20.18) PWD SR - 2013-14.** | Cum | | | | | | | |
| | | | 1 | 130.00 | 6.40 | 0.20 | 166.40 | | |
| | | | | | | | **166.40** | 1121.04 | **186541.00** |
| | Basic Rate | 1038.00 | | | | | | | |
| | Area Weightage @ 8% | 83.04 | | | | | | | |
| | **Total** | **1121.04** | | | | | | | |
| 13 | KSRRB 500-1.1 : Cleaning the existing WBM road surface including removing of binding materials and other foreign matter with wire bushes and small picks, sweeping with brooms or soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries, curing complete as per specifications. Specification No. 500-1.3 **(P.175 / I.21.1) PWDSR 2013-14** | Sqm | | | | | | | |
| | | | 1 | 130.00 | 6.40 | | 832.00 | | |
| | | | | | | | **832.00** | 10.53 | **8761.00** |
| | Basic Rate | 9.75 | | | | | | | |
| | Area Weightage @ 8% | 0.78 | | | | | | | |
| | **Total** | **10.53** | | | | | | | |
| 14 | KSRRB 500-5: providing and applying primer coat from 12.2 to 14.6kg per 10 sqm for surfaces of high porosity over prepared surface of granular base with cut back M.C.-70 or any other bitumen mixed with diesel at 13 kg per 10 sqm heated in bitumen boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH chapter 5, **No. 175 / Item No. 21.5 / PWD SR 2013-14** | Sqm | | | | | | | |
| | | | Qty Vide Item No. 10 | | | | **832.00** | 142.07 | **118206.00** |
| | Basic Rate | 131.55 | | | | | | | |
| | Area Weightage @ 8% | 10.52 | | | | | | | |
| | **Total** | **142.07** | | | | | | | |
| 15 | KSRRB M500-18: Providing and laying semi dense bituminous concrete 25mm thick with 100-120 TPH batch type HMP producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder at 4.5 to 5% of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem roller to achieve the desired compaction as per MORTH specifications clause No. 500.8 complete in all respects as per specificationsWith 60/70 grade bitumen using 40-60 HMP, **No. 178 / Item No. 21.20.4 / PWD SR 2013-14.** | Cum | | | | | | | |

| Sl. No | Description | Unit | No. | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 130.00 | 6.40 | 0.025 | 20.80 | | |
| | | | | | | | **20.80** | 9981.36 | **207612.00** |
| | Basic Rate | 9242.00 | | | | | | | |
| | Area Weightage @ 8% | 739.36 | | | | | | | |
| | **Total** | **9981.36** | | | | | | | |
| 16 | KSRRB M800-13: Road marking with hot applied thermoplastic compound with reflect rising glass beads on bituminous surface- providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface to level, uniform and free from streaks and holes complete as per specifications. MORTH specification No. 803, **No. 197 / Item No. 24.15 PWD SR 2013-14** | Sqm | | | | | | | |
| | | | 2 | 130.00 | 0.10 | | 26.00 | | |
| | | | | | | | **26.00** | 471.96 | **12271.00** |
| | Basic Rate | 437.00 | | | | | | | |
| | Area Weightage @ 8% | 34.96 | | | | | | | |
| | **Total** | **471.96** | | | | | | | |
| 17 | Lead for Disposal of Debris shall be payable at carriage rates by Mechanical means inlcuding loading and unloading. From 0.00 to 2.00 Km ( Page No.123) | Cum | | | | | | | |
| | | | Vide Item No. 1 | | | | **57.45** | 72.71 | **4177.00** |
| | Basic rate for haulage of materials as per item no.17.4 page 141) Rs. 2.00 | | | | | | | | |
| | Average weight of earth 1.28 tonne / kg for 2X1.28X2.00=5.12 | 5.12 | | | | | | | |
| | Add loading and unloading Vide item no.17.1 P.no.141 | 62.20 | | | | | | | |
| | | **67.32** | | | | | | | |
| | Area Weightage @ 8% | 5.39 | | | | | | | |
| | **Total** | **72.71** | | | | | | | |
| 18 | Miscellaneous and other Charges | L/S | | | | | | | **886.00** |
| | | | | | | | | **Total** | **700000.00** |

**(Rs. Seven Lakhs Only)**

Technical Sanction for Rs. 7.00 lakhs
Seven lakhs only
EE/BTP/319/13-14, 7/2/14
Subject to conditions contained enclosed memo.
Dr.
AE/JE
EE (BTP. Div.)

**CERTIFICATE:**

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per P.W.D S.R of 2013-14.
3 The provisions were made in this estimate are necessary and adequate.
4 This works come under B.B.M.P. limits.

Assistant Engineer

D. N. Madhusudan
Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Kodigehalli Sub Division

Executive Engineer
Bruhat Bangalore Mahanagara Palike
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